

REMARKS

In the last Office Action, the Examiner rejected claims 1, 7, 8 and 14 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,026,101 to Moyer in view of U.S. Patent No. 6,661,428 to Kim. Claims 2 and 9 were rejected under 35 U.S.C. §103(a) as being unpatentable over Moyer in view of Kim and further in view of U.S. Patent No. 6,597,339 to Ogawa. Claims 5, 6, 10 and 11 were rejected under 35 U.S.C. §103(a) as being unpatentable over Moyer in view of Kim and further in view of Ogawa and U.S. Patent No. 6,157,169 to Lee. Claims 3 and 12 were rejected under 35 U.S.C. §103(a) as being unpatentable over Moyer in view of Kim and further in view of Ogawa and U.S. Patent No. 5,285,430 to Decker. Claims 4, 13 and 15-19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Moyer in view of Kim and further in view of U.S. Patent No. 4,513,282 to Nakagiri. Claim 20 was rejected under 35 U.S.C. §103(a) as being unpatentable over Moyer in view of Kim and further in view of Nakagiri and Decker.

In accordance with this amendment, claims 1, 2, 8, and 9 have been amended to recite with more specificity that the display brightness control means (claims 1, 2) and the display brightness controller (claims 8, 9) control the brightness of the selected display segment (i.e., the

brightness is increased or decreased) during the time correction mode. Likewise, claims 15, 17 and 19 have been amended to recite with more specificity that the control means controls the font size (claims 15, 19) or the brightness (claim 17) of the selected display segment (i.e., the font size or the brightness is increased or decreased) during the time correction mode. These structures and corresponding functions recited in the claims are not disclosed or suggested by the prior art of record.

Applicant most respectfully requests entry of the foregoing amendments since claims 1, 2, 8, 15, 17 and 19 have been amended only to define with more specificity the function of the display brightness control means (claims 1, 2), display brightness controller (claims 8, 9), and control means (claims 15, 17, 19). Thus, no further consideration or search is necessitated by the amendments. In addition, the amendments substantially narrow any appealable issues because they present the claims in a substantially narrowed form. Thus, entry of the foregoing amendments does not impose a burden on the Examiner and should not be denied.

Applicant requests reconsideration of his application in light of the foregoing amendments and the following discussion.

The present invention relates to a portable electronic apparatus. As described in the specification (pages 1-4), conventional portable electronic apparatuses, such as portable electronic timepieces, are associated with large power consumption due to the fact that a light for the display must be turned on constantly for a function specific to the timepiece. More specifically, the conventional portable electronic apparatuses have not been able to adjust the brightness of the display (i.e., to facilitate visual recognition of the display) with low power consumption.

The present invention overcomes the drawbacks of the conventional art. Figs. 1-4 show an embodiment of the portable electronic apparatus 201 according to the present invention in the form of a portable electronic timepiece. The portable electronic apparatus has a display 108 having display segments (i.e., for digits of segments shown in Fig. 2) for indicating time in a time display mode. A selecting circuit 104 (e.g., operable via switch swC in Fig. 2) selects one of the display segments of the display 108 in the time display mode for modification of the display segment in a time correction mode in which the time indicated in the time display mode is corrected. A display brightness controller 106 controls the display 108 so that the display segment selected by the selecting circuit 104 has a display brightness

higher than that of the other display segments displayed by the display 108.

By the foregoing construction, the portable electronic apparatus according to the present invention performs display that is easy to visually recognize while accomplishing it with low power consumption. When the portable electronic apparatus is a portable electronic timepiece, the foregoing advantages are highly beneficial during a time correction mode, in which time indicated in a time display mode is corrected, because the display time in a time correction mode is longer than other display times during use of the timepiece.

Claims 1-20 were rejected under 35 U.S.C. §103(a) over various combinations of the references to Moyer, Kim, Ogawa, Lee, Decker and Nakagiri. Applicant respectfully traverses these rejections and submits that the combined teachings of the references do not disclose or suggest the subject matter recited in amended independent claims 1, 8 and 15 and corresponding dependent claims 2-7, 9-14 and 16-20.

Independent Claims 1 and 8

Amended independent claim 1 is directed to a portable electronic apparatus and requires display means for displaying a plurality of display segments to indicate time in

a time display mode, manipulation means for selecting any one of the display segments displayed by the display means in the time display mode for modification of the selected display segment in a time correction mode in which the time indicated in the time display mode is corrected, and display brightness control means for controlling the display means so that during the time correction mode, the display segment selected by the manipulation means has a display brightness higher than that of the other display segments displayed by the display means.

Thus independent claim 1 recites manipulation means for selecting any one of the display segments displayed by the display means in the time display mode for modification of the selected display segment in a time correction mode in which the time indicated in the time display mode is corrected, and display brightness control means for controlling the display means so that during the time correction mode, the display segment selected by the manipulation means has a display brightness higher than that of the other display segments displayed by the display means. No corresponding structural and functional combination is disclosed or suggested by the combined teachings of Moyer and Kim.

The primary reference to Moyer discloses a timepiece for displaying display segments and manipulation means for selecting one of the display segments. While functioning to

select one of the display segments, the manipulation means in Moyer does not function to select any one of the display segments displayed by the display means in the time display mode for modification of the selected display segment in a time correction mode in which the time indicated in the time display mode is corrected, as recited in independent claim 1. The Examiner contends that this feature recited in claim 1 is disclosed in column 7, line 60 to column 8, line 19 in Moyer. Applicant respectfully disagrees.

With reference to Fig. 1, the specific portions of the disclosure in Moyer identified by the Examiner describe that "when only the button B₃ is depressed, the hours are being displayed and will be advanced." Thus depression or manipulation of the button B₃ does not involve the selection of a display segment (e.g., the segment denoting the hour) displayed in the time display mode (i.e., the mode in which the hours and minutes are displayed, as noted by Moyer in col. 7, lines 63-64). Instead, the depression of the button B₃ places the timepiece in the time correction mode (i.e., the hour segment is advanced). Stated otherwise, the timepiece in Moyer is in the time correction mode, not in the time display mode, during manipulation of the button B₃. Thus Moyer does not disclose or suggest manipulation means for selecting any one of the display segments displayed by the display means in

the time display mode, and further for modification of the selected display segment in a time correction mode in which the time indicated in the time display mode is corrected, as recited in independent claim 1.

Moreover, independent claim 1 has been amended to specify that the display brightness control means controls the display means so that during the time correction mode, the display segment selected by the manipulation means has a display brightness higher than that of the other display segments displayed by the display means. As recognized by the Examiner, the structure and corresponding function of the display brightness control means is not disclosed or suggested by Moyer.

The secondary reference to Kim has been cited by the Examiner for its disclosure of a system for controlling a luminance of a display device. However, Kim does not disclose or suggest display brightness control means for controlling the display means so that during the time correction mode, the display segment selected by the manipulation means has a display brightness higher than that of the other display segments displayed by the display means, as recited in amended independent claim 1. Stated otherwise, Kim does not disclose any means for controlling the luminance of a display device during a time correction mode of an electronic apparatus

having such display device. In this regard, Kim does not deal at all with an apparatus having either a time display mode or a time correction mode. Thus, Kim also does not disclose or suggest manipulation means for selecting any one of display segments displayed by the display means in a time display mode for modification of the selected display segment in a time correction mode in which the time indicated in the time display mode is corrected, as recited in independent claim 1.

Thus, since Kim does not disclose or suggest the display brightness control means and the manipulation means and corresponding functions recited in amended independent claim 1, it does not cure the deficiencies of Moyer. Accordingly, one of ordinary skill in the art would not have been led to modify the references to attain the claimed subject matter.

Independent claim 8 is also directed to a portable electronic apparatus and recites a selecting circuit for selecting one of the display segments of the display in the time display mode for modification of the selected display segment in a time correction mode in which the time indicated in the time display mode is corrected, and a display brightness controller for controlling the display so that during the time correction mode, the display segment selected by the selecting circuit has a display brightness higher than

that of the other display segments displayed by the display. No corresponding structural and functional combination is disclosed or suggested by the combined teachings of Moyer and Kim as set forth above for amended independent claim 1.

Independent Claim 15

The Examiner rejected independent claim 15 over the combined teachings of Moyer, Kim and Nakagiri. Applicant respectfully traverses this rejection.

Amended independent claim 15 is directed to a portable electronic apparatus and requires a display having a plurality of display segments for indicating time in a time display mode, selecting means for selecting one of the display segments of the display in the time display mode for modification of the selected display segment in a time correction mode in which the time indicated in the time display mode is corrected, and control means for controlling the display so that during the time correction mode, the display segment selected by the selecting means has a font size larger than that of the other display segments displayed by the display.

Moyer in view of Kim does not disclose or suggest the selecting means and corresponding function recited in independent claim 15 as set forth above for the manipulation means and corresponding function recited in independent claim 1.

The reference to Nakagiri discloses a display device including means for selecting a display segment and for adjusting the size of the display segment. However, Nakagiri does not disclose or suggest control means for controlling the display so that during the time correction mode, the display segment selected by the selecting means has a font size larger than that of the other display segments displayed by the display, as recited in amended independent claim 15. Stated otherwise, Nakagiri does not disclose any means for controlling or adjusting the size of a display element in a display device during a time correction mode of an electronic apparatus having such display device. In this regard, Nakagiri does not deal at all with an apparatus having either a time display mode or a time correction mode. Thus, Nakagiri also does not disclose or suggest selecting means for selecting one of the display segments of the display in the time display mode for modification of the selected display segment in a time correction mode in which the time indicated in the time display mode is corrected, as recited in amended independent claim 15.

Thus, since Nakagiri does not disclose or suggest the selecting means and the control means and corresponding functions recited in amended independent claim 15, it does not cure the deficiencies of Moyer as modified by Kim. Accordingly, one of ordinary skill in the art would not have been led to modify the references to attain the claimed subject matter.

Claims 2-7, 9-14 and 16-20 depend on and contain all of the limitations of amended independent claims 1, 8 and 15, respectively, and, therefore, distinguish from the references at least in the same manner as claims 1, 8 and 15.

The remaining cited references to Ogawa, Lee and Decker disclose electronic apparatuses employing display means for displaying display segments and manipulation means for selecting one of the display segments. However, none of these references teaches a portable electronic apparatus having the manipulation means and display brightness control means and corresponding functions (claims 1-7), the selecting circuit and display brightness controller and corresponding functions (claims 8-14), and the selecting means and control means and corresponding functions (claims 15-20) recited in claims 1-20.

In view of the foregoing, applicant respectfully requests that the rejections of claims 1-20 under 35 U.S.C. §103(a) as being unpatentable over the various combinations of the references to Moyer, Kim, Ogawa, Lee, Decker and Nakagiri be withdrawn.

Applicant most respectfully requests entry of the foregoing amendments since claims 1, 2, 8, 15, 17 and 19 have been amended only to define with more specificity the function of the display brightness control means (claims 1, 2), display brightness controller (claims 8, 9), and control means (claims 15, 17, 19). Thus, no further consideration or search is necessitated by the amendments. In addition, the amendments substantially narrow any appealable issues because they present the claims in a substantially narrowed form. Thus, entry of the foregoing amendments does not impose a burden on the Examiner and should not be denied.

In view of the foregoing amendments and discussion,
the application is believed to be in allowable form.
Accordingly, entry of this amendment and favorable
reconsideration and allowance of the claims are most
respectfully requested.

Respectfully submitted,

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NOVEMBER 15, 2006

Date